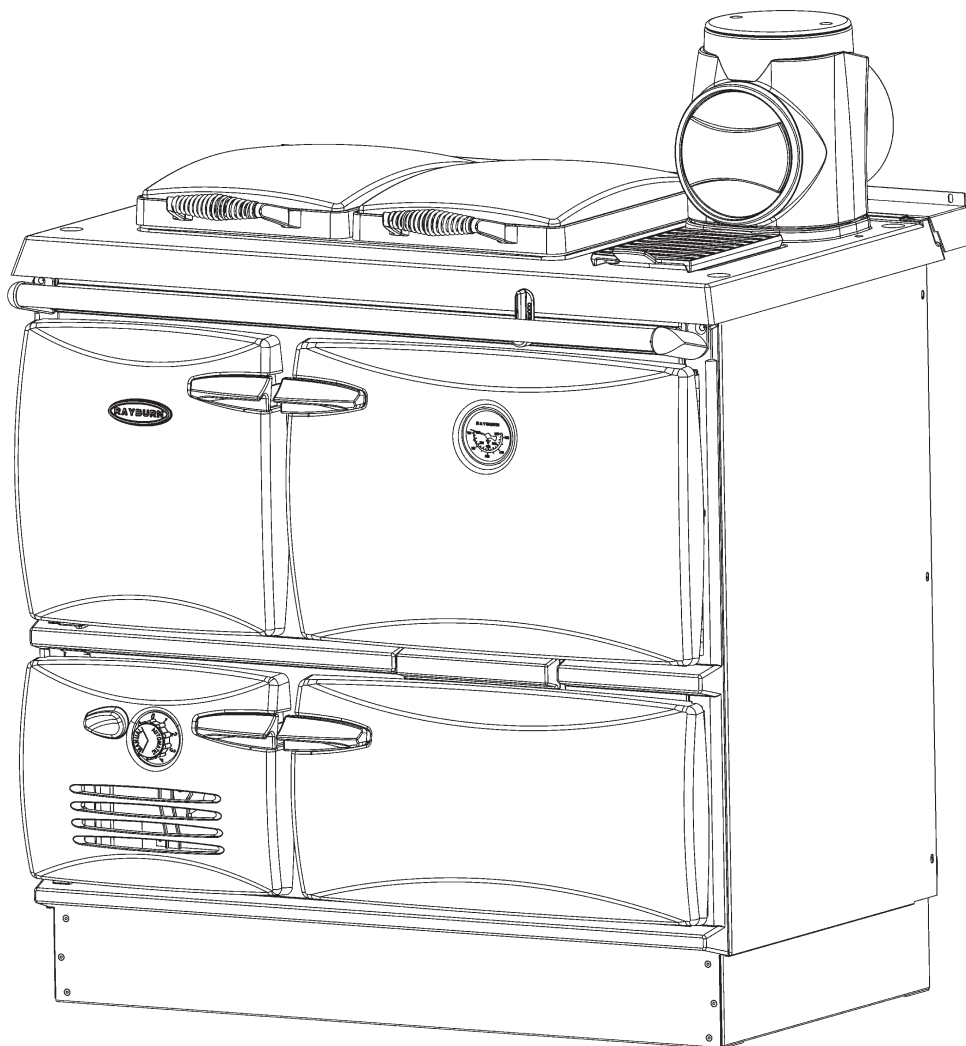




RAYBURN 370 SFW



To ensure safety, satisfaction and maximum service, **this Cooker should be installed by a suitably qualified and competent person.** The provision of a Central Heating facility, requires that the hot water systems involved, conform fully to good plumbing practice and established standards.

INSTALLATION INSTRUCTIONS

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Consumer Protection Act 1987

As responsible manufacturers, we take care to make sure that our products are designed and constructed to meet the required safety standards when properly installed and used.

IMPORTANT NOTICE: PLEASE READ THE ACCOMPANYING WARRANTY: Any alteration that is not approved by AGA, could invalidate the approval of the appliance, operation of the warranty and could also affect your statutory rights. Use only authorised replacement parts.

All local regulations including those referring to national and European standards need to be complied with when installing the appliance.

Control of Substances - Health and Safety Important

This appliance may contain some of the materials that are indicated. It is the Users/Installers responsibility to ensure that the necessary personal protective clothing is worn when handling, where applicable, the pertinent parts that contain any of the listed materials that could be interpreted as being injurious to health and safety, see below for information.

Firebricks, Fuel beds, Fuels - when handling use disposable gloves.

Fire Cement - when handling use disposable gloves. In case of skin contact wash immediately with plenty of water.

Glues and Sealants - exercise caution - if these are still in liquid form use face mask and disposable gloves.

Glass Yarn, Mineral Wool, Insulation Pads, Ceramic Fibre, Kerosene Oil - may be harmful if inhaled, may be irritating to skin, eyes, nose and throat. When handling avoid inhaling and contact with skin or eyes. Use disposable gloves, face-masks and eye protection. After handling wash hands and other exposed parts. When disposing of the product, reduce dust with water spray, ensure that parts are securely wrapped.

Handling Adequate facilities must be available for loading, unloading and site handling.

Asbestos

This stove contains no asbestos. If there is a possibility of disturbing any asbestos in the course of installation then please seek guidance and use appropriate protective equipment.

TECHNICAL DATA

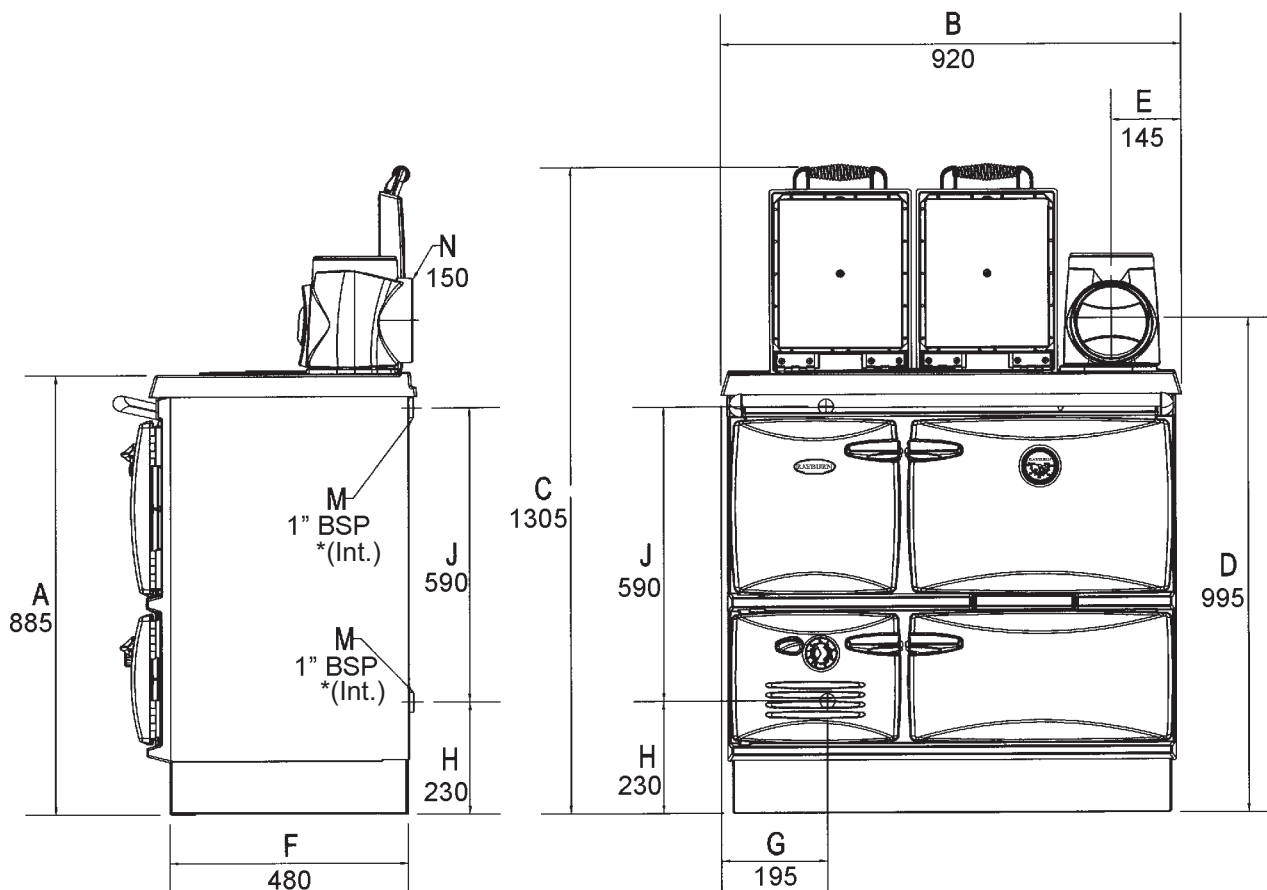
Manufactured Smokeless Fuel (Ancit)				
Mode	Total Output (kW)	Room Output (kW)	Boiler Output (kW)	Efficiency
Winter	21.6	8.2	13.4	72.7
Summer	12.2	4.3	7.9	69.8
Typical Refuelling Interval To Obtain Nominal Outputs:			2.0 hrs	
Flue Gas Temperature At Nominal Output:			231-260°C	
Flue Gas Mass Flow:			14.1-16.9 g/s	

Wood Logs				
Mode	Total Output (kW)	Room Output (kW)	Boiler Output (kW)	Efficiency
Winter	15.3	5.3	10.0	69.9
Summer	10.9	4.7	6.2	63.6
Typical Refuelling Interval To Obtain Nominal Outputs:			1.0 hrs	
Flue Gas Temperature At Nominal Output:			269-282°C	
Flue Gas Mass Flow:			18.8-21.3 g/s	
Maximum Log Length			380mm	

General	
Gross Weight:	400kg
Flue Outlet Diameter:	150mm
Max Water Pressure:	1.79 Bar
Minimum Flue Draught:	15 pa
Boiler Water Capacity:	20 Litres

SPECIFICATION

Fig.1



WARNING:- THIS APPLIANCE MUST NOT BE USED WITHOUT WATER CONNECTED, OTHERWISE DAMAGE TO THE BOILER MAY BE CAUSED AND/OR HEAT DAMAGE TO SURROUNDING SURFACES.

* (Int.) Internal Thread

ELECTRICAL CONNECTIONS

The installation of any electrical services during the installation of this cooker with boiler and the associated heating system must be carried out by a registered competent electrician and in accordance with the requirements of the latest issue of BS 7671.

SITE PREPARATION

The non-combustible hearth must be solid and level and together with the walls adjacent to the cooker and chimney, conform to current Building Regulations.

The cooker and chimney flue installation should be in accordance with current issues of British Standards BS EN 15287-1:2007 design, installation and commissioning of chimneys. BS EN 14336:2004: Heating Systems in Buildings. Installation and commissioning of water based heating systems. BS EN 12828: 2003; Heating Systems in Buildings. Design of water based heating systems. BS EN 12831: 2003; Heating Systems in Buildings. Method for calculation of the design heat load. As applicable to the appliance. The boiler installation section must also be in accordance with the byelaws of the local Water Undertaking, Regulations for the Electrical Equipment of Buildings published by the Institute of Electrical Engineers and any relevant requirements of the Local Authority.

Ensure that any electrical wiring is correctly earthed.

COOKER POSITION

When the cooker is installed in a recess it must be 'freestanding' and not built-in solid at the sides. Ensure that any combustible material e.g. kitchen furniture is spaced away from the cooker to the recommended distances. See Clearance to Combustibles Section.

BUILDERS OPENING

The fireplace recess should comply with current building regulations, and have an opening of 1,080mm wide minimum, by 343mm deep minimum and 1,680mm high minimum from floor is recommended.

PLEASE NOTE: IT IS ADVISABLE TO CHECK THE SIZE/WIDTH OF YOUR APPLIANCE BEFORE FINALLY FIXING ANY KITCHEN UNITS SINCE ENAMELLED CAST IRON CAN VARY IN SIZE.

THE CHIMNEY

The minimum chimney draught requirement at nominal total heat output is 15 Pa/.06" WG.

This appliance is not suitable for installation in a shared flue system.

Checking existing chimney

The internal and external condition of the chimney should be checked **before** the appliance is installed and rectification made where necessary to prevent leakage or porosity. The soundness of the chimney which should have a minimum flue dimension of 150mm diameter can be confirmed by smoke testing. Advice on the test method can be obtained from HETAS.

When repairing or re-using chimneys its recommended that the building control office be consulted before the commencement of work with particular attention to the chimney height and its termination.

The chimney must be swept before installation.

Erecting New Chimney

The flue through the chimney should be formed with pre-cast moisture and acid-resistant liners with a minimum internal dimension of 185mm square and all in accordance with the current Building Regulations (England and Wales) and in Scotland the Building Standards (Scotland) (Consolidation) Regulations and the Codes of Practice for chimneys and flues BS. 6461 Part 1 and BS 7566 Parts 1 to 4.

Ensure the chimney liners are free of projecting internal building jointing composition before the appliance is installed.

Factory made Insulated Chimneys

It is recommended the chimney be ceramic lined and comply with BS. 4543.

The minimum chimney diameter is 150mm.

IN ALL TYPES OF CHIMNEYS THE MINIMUM HEIGHT FOR CORRECT OPERATION OF THE COOKER IS 4.8m AND SHOULD TERMINATE ABOVE THE ROOF IN ACCORDANCE WITH REGIONAL STATUTORY REQUIREMENTS.

RECOMMENDED FLUE DRAUGHT - 15Pa/.06" WG MINIMUM. THE APPLIANCE SHOULD BE INSTALLED AND CONFORM TO THE CURRENT CODES OF PRACTICE FOR INSTALLATION OF DOMESTIC HEATING AND COOKING APPLIANCES BURNING SOLID FUEL - BS 8303.

ALWAYS ADVISE THE USER TO CLEAN THE COOKER FLUES IN ACCORDANCE WITH THE OPERATING INSTRUCTIONS AND TO HAVE THE CHIMNEY SWEEPED AT A MINIMUM OF 6 MONTHLY INTERVALS AFTER THE COOKER IS COMMISSIONED. A VISUAL INSPECTION SHOULD BE CARRIED OUT MONTHLY.

Where the chimney is believed to have previously served an open fire installation it is possible that the higher flue gas temperature from a closed appliance may loosen deposits that were previously firmly adhered, with the consequent risk of flue blockage. It is therefore recommended that the chimney be swept a second time within a month of regular use after installation.

WARNING: PROLONGED SOOT FORMATION MAY RESULT IN THE FLUEWAYS BECOMING BLOCKED AND COULD GIVE RISE TO THE RELEASE OF CARBON MONOXIDE, A POISONOUS GAS, INTO THE ROOM.

COOKER FLUE CONNECTION

The position of available types of flue layouts are shown in Figs. 2, 3 and 4, the cooker flue chamber is adaptable to provide either top or back flue outlets, by means of the reversible loose socket.

(a) Rear Flue Outlet

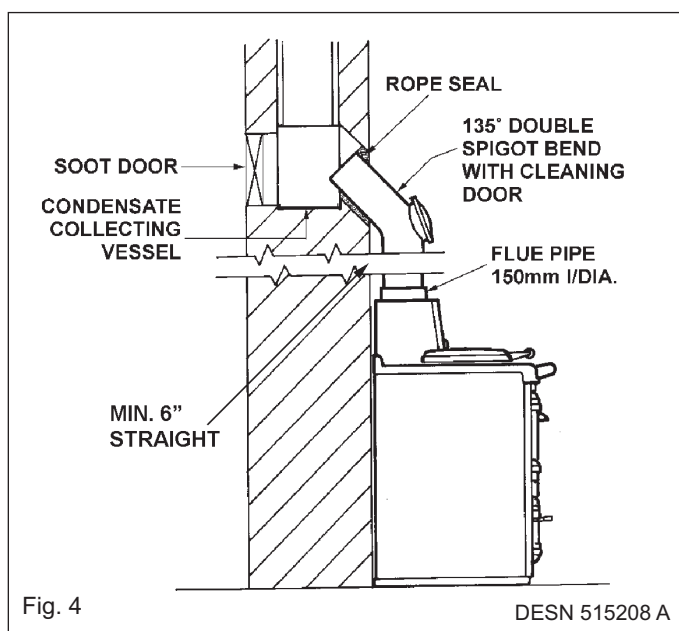
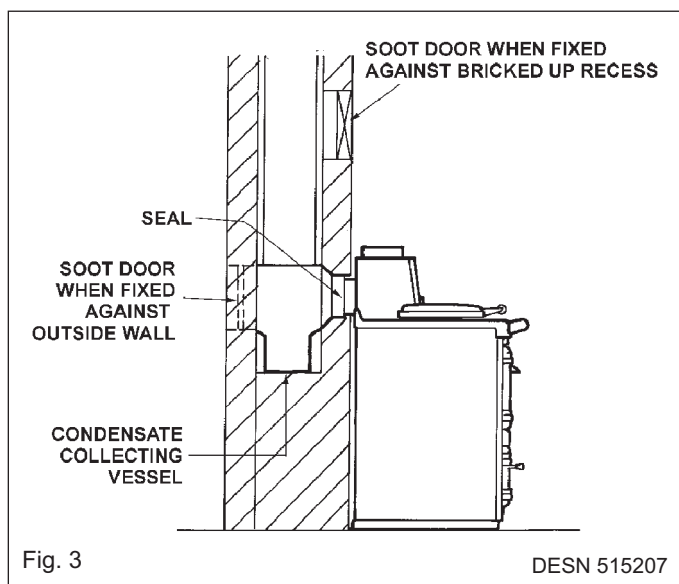
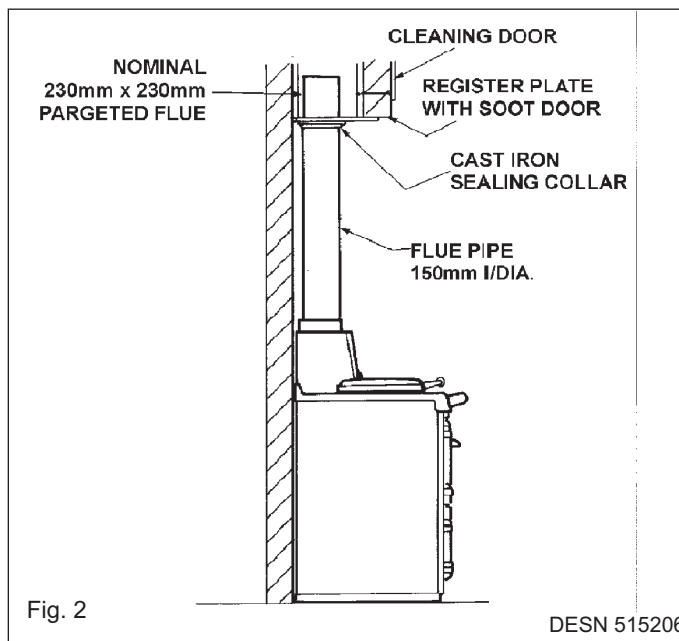
This must only be used where there is a brick flue immediately behind the cooker. Provision must be made for a condensate collecting vessel and cleaning door. See Fig. 3.

NOTE: MAXIMUM HORIZONTAL LENGTH 150mm. EXTENDED REAR FLUE PIPE AND BENDS ARE NOT RECOMMENDED.

(b) Top Flue Outlet

The cooker should be connected to the main flue via a 150mm minimum diameter cast iron pipe or appropriately sized vitreous enamelled mild steel pipe and be sealed to the cooker flue chamber with soft rope and fire cement.

Any bends in the flue pipe must be not less than 135° (45° from horizontal) and be complete with a cleaning door.



A minimum 6" vertical length of flue pipe must be fitted before any bend is included.

FLUE LAYOUTS

In Fig. 2. the cooker is installed in an existing recess. There must be a clearance of not less than 150mm between the top of the flue pipe and any overhanging brickwork.

Any cavities or pockets above the register plate should as far as possible be filled and if necessary the flue pipe should be extended into the throat of the chimney and soot door provided for chimney sweeping.

If a flue liner or insulated chimney is used, the size should not be less than 150mm diameter.

There are two Isokern pumice liners which are also recommended. One is the standard 175mm diameter and the other is a 170mm thin wall. The thin wall has a smaller outer diameter and is designed to fit an existing chimney system. Both have a lifetime guarantee.

In Fig. 3, the cooker is connected direct to a brick flue. Horizontal pipe runs between cooker and brick flue **must not** be used.

In Fig. 4, the cooker is connected to an existing brick flue with a length of flue pipe. Square bends and horizontal runs **must not** be used. There must be a cleaning door at every bend.

NOTE: WHATEVER METHOD OF INSTALLATION IS EMPLOYED, AIR MUST NOT BE ALLOWED TO ENTER THE CHIMNEY EXCEPT THROUGH THE COOKER. ALL JOINTS MUST BE AIR-TIGHT.

If the chimney is unlined, and there is any doubt about its condition, it should be lined in accordance with current Building Regulations.

PROVISION MUST ALWAYS BE MADE FOR SWEEPING THE CHIMNEY.

IMPORTANT: CEMENT TYPE PIPES AND FITTINGS MUST NOT BE USED WITHIN 2m. OF THE COOKER. CHIMNEYS OF PLAIN PIPE ARE NOT RECOMMENDED BUT CERTAIN PROPRIETARY MAKES OF INSULATED CHIMNEY ARE SUITABLE.

VENTILATION & COMBUSTION AIR REQUIREMENTS

It is imperative that there is sufficient air supply to the cooker in order to support correct combustion. The air supply to this appliance must comply with current Building Regulations. The minimum effective air requirement for this appliance is 91.3cm².

This increases to 141.1cm² where a flue draught stabiliser is fitted. If another appliance is fitted in an adjacent room it will be necessary to calculate an additional air supply.

All materials used in the manufacture of air vents should be such that the vent is dimensionally stable, corrosion resistant, and no provision for closure. The effective free area of any vent should be ascertained before installation. The effect of any grills should be allowed for when determining the effective free area of any vent.

Air vents direct to the outside of the building should be located so that any air current produced will not pass through normally occupied areas of the room.

An air vent outside the building should not be located less than the dimensions specified within the Building Regulations and B.S. 8303: Part 1 from any part of any flue terminal. These air vents must also be satisfactorily fire proofed as per Building Regulations and B.S. 8303: Part 1.

Air vents in internal walls should not communicate with bedrooms, bedsits, toilets, bathrooms or rooms containing a shower.

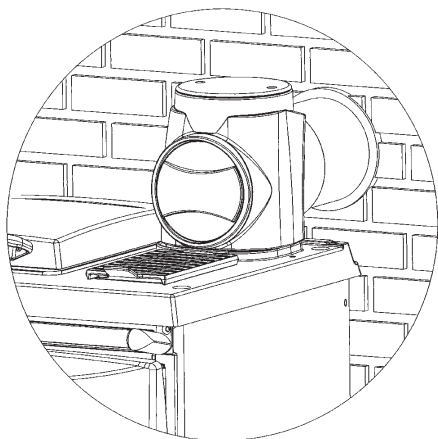
Air vents traversing cavity walls should include a continuous duct across the cavity. The duct should be installed in such a manner as not to impair the weather resistance of the cavity.

Joints between air vents and outside walls should be sealed to prevent the ingress of moisture. Existing air vents should be of the correct size and unobstructed for the appliance in use. If there is an extraction fan fitted in adjacent rooms where this appliance is fitted, additional air vents may be required to alleviate the possibility of spillage of products of combustion from the appliance/flue while the fan is in operation. There must not be an extractor fan fitted in the same room as the appliance.

Where such an installation exists, a test for spillage should be made with the fan or fans and other appliances using air in operation at full rate, (i.e. extraction fans, tumble dryers) with all external doors and windows closed.

If spillage occurs following the above operation, an additional air vent of sufficient size to prevent this occurrence should be installed.

If the cooker is being fitted in a property where the design air permeability is less than $5\text{m}^3 / (\text{h}.\text{m}^2)$ (normally newer properties built from 2006), then a permanent ventilation must be fitted to provide 550mm^2 of ventilation for each kW of rated output. If a draught stabiliser is also fitted then the requirement is 850mm^2 per kW of rated output.



FLUE BOX

CENTRAL HEATING AND HOT WATER SYSTEM

It is recommended that a 190 litre (40 galls) indirect hot water storage cylinder of the double feed type e.g. (Complying with BS. 1566 Part 1:DF Type 10) should be lagged and fixed vertically as near as possible to the cooker.

The 28mm minimum diameter primary flow and return pipes must not exceed 10m in length and pipes longer than 5m must be lagged.

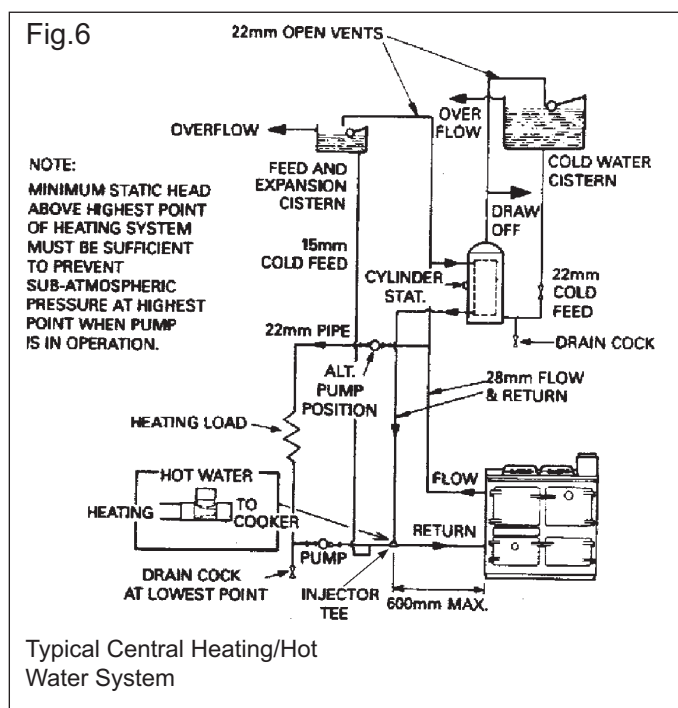
Ensure that the flow pipe has an open vent and rises continuously from the boiler to the cylinder to ensure good gravity circulation.

There are only two boiler tappings on this cooker and a typical design layout is shown in Fig. 6.

An injector tee is provided which must be fitted to ensure adequate primary flow circulation when the water circulator is operating, otherwise there may be a lack of domestic hot water. The heating flow and return pipes may be 22mm, the return pipe being connected to the 28mm primary return by the injector tee, and the tee outlet connected to the boiler return pipe.

All installations must be fitted with a drain tap at the lowest point of the system.

A corrosion inhibitor **MUST** be added to the heating system to protect the heat exchanger and pipework. Inhibitor must also be replaced if the system is drained after installation. As a precaution, the heating system **MUST** also be flushed out prior to the addition of the inhibitor to ensure any flux, debris is removed.



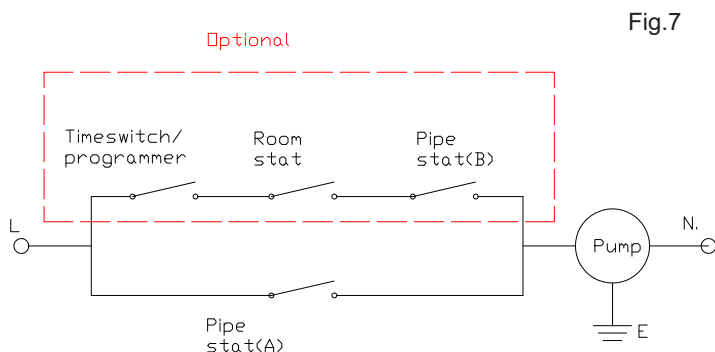
CENTRAL HEATING PUMP CONTROL

The central heating pump must be controlled by fitting a pipe thermostat on the flow pipe as close as possible to the cooker. If it is used on its own it should be set to approx. 55°C

Alternatively the pipe thermostat (A) can be wired in parallel with another pipe thermostat (B) which is wired in series with a timeclock and room thermostat.

In this instance priority can be given to hot water by setting the pipe thermostat (A) to approx. 85°C used only to prevent boiling, the pipe thermostat (B) should be set to approx. 55°C.

AT LEAST ONE RADIATOR (USUALLY THE BATHROOM) SHOULD **NOT** BE FITTED WITH A TRV (THERMOSTATIC RADIATOR VALVE), TO ACT AS A HEAT LEAK, SHOULD THE BOILER OVERHEAT AND THE PUMP FAIL TO START.



HIGH UPDRAUGHTS

Tall chimneys may develop excessively high up-draughts which prevent the appliance operating correctly.

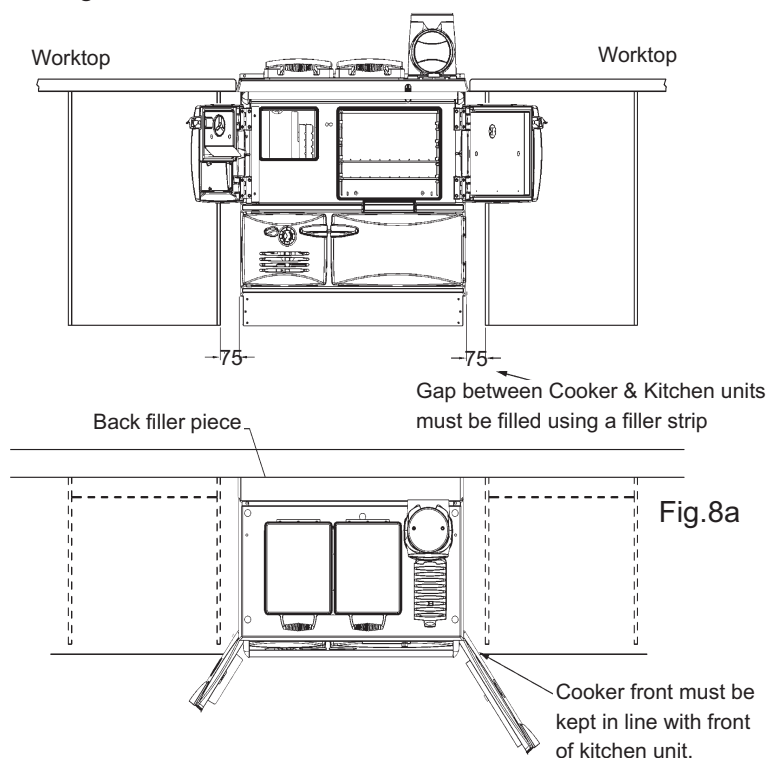
It is recommended that a proprietary brand adjustable flue draught stabiliser having an openable cross sectional area of 182.5sq cm (6"Ø pipe) be fitted above the flue pipe connection, either in the brickwork or into a right angle 'T'; fitting in the flue pipe position that will not inconvenience appliance operation or maintenance.

COOKER CLEARANCE

The Cooker should not be installed at zero clearance to combustible materials. The sides should have a minimum clearance of at least 75 mm (3") from combustible materials unless otherwise fully insulated.

This cooker is supplied with a back filler piece which should be used with fitting the cooker between kitchen units. This filler piece is mounted to the wall behind the cooker using the appropriate screws and rawl plugs (not supplied) and allows adequate clearance from the front of the cooker to the front of the kitchen units for door opening (see Fig.8 & 8a)

Fig.8



TESTING & COMMISSIONING

After completing the installation, the heating contractor should demonstrate to the user the operation of the appliance and the routine cleaning method.

The protective grease should be removed from the hotplate before lighting.

Check that the system is full of water and free from air locks.

For the first couple of days do not overfire. The cast iron inside the cooker will build up heat gradually and overfiring may cause damage.

NOTE: SMOKE/SMELL EMITTED DURING INITIAL USAGE

Some parts of the cooker have been coated with a light covering of protective oil. During initial operation of the cooker, this may cause smoke/smell to be emitted and is normal and not a fault with the appliance, it is therefore advisable to open doors and or windows to allow for ventilation. Lift the lids to prevent staining the linings.

Ensure all parts are fitted in accordance with the instructions.

On completion of the installation allow a suitable period of time for any fire cement and mortar to dry out, before lighting the stove. Once the stove is under fire

check all seals for soundness and check that the flue is functioning correctly and that all products of combustion are vented safely to atmosphere via the chimney terminal.

On completion of the installation and commissioning ensure that the operating instructions for the stove are left with the customer. Advise the user what to do should smoke or fumes be emitted from the stove.

Building Regulations require that whenever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturer's instructions.

CO ALARM

Provision of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the appliance and chimney system.

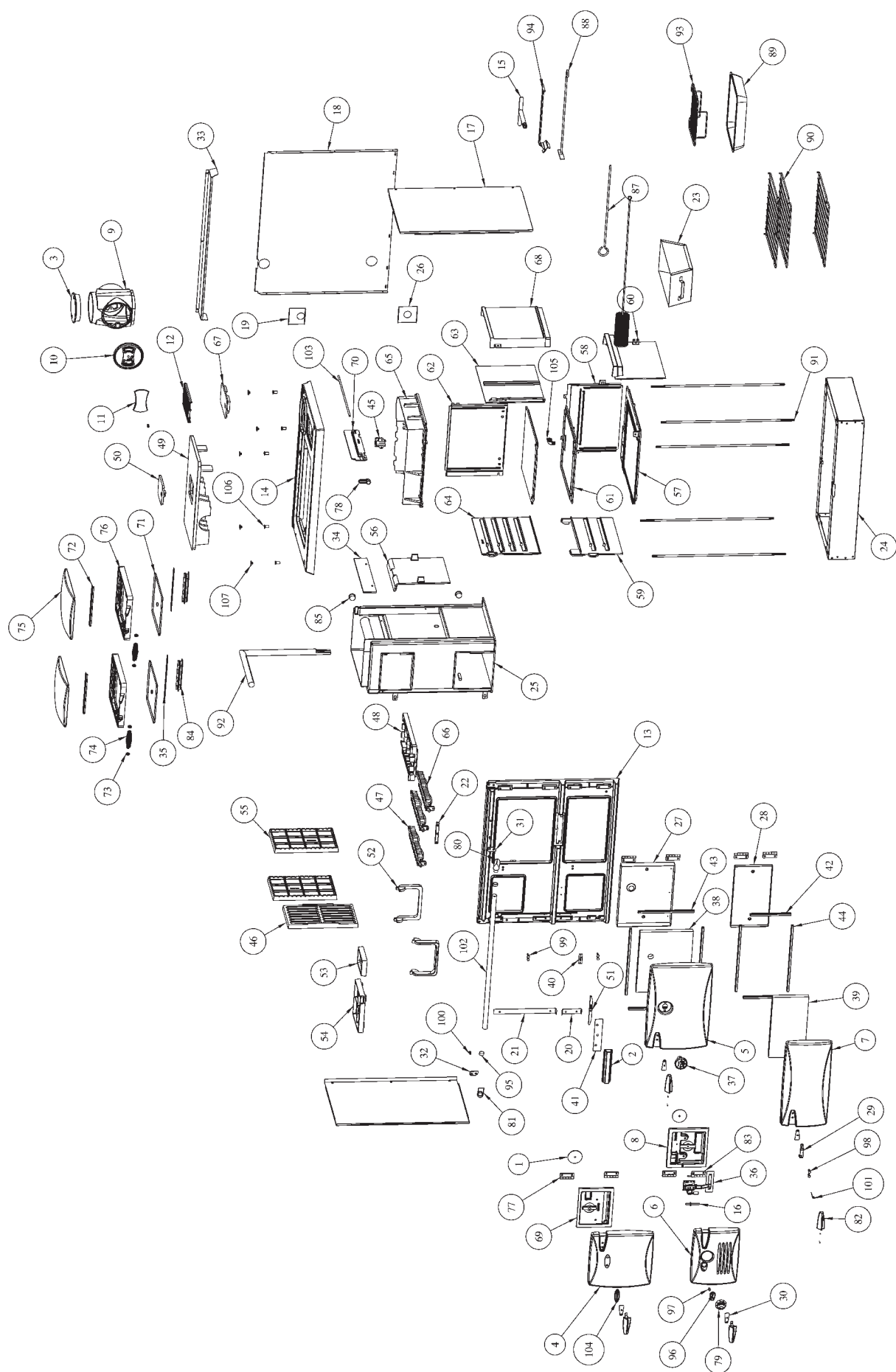
Your installer should have fitted a CO alarm in the same room as the appliance. If the alarm sounds unexpectedly, follow the instructions given under "Warning Note" below.

WARNING:-

If the CO Alarm sounds unexpectedly:-

- 1. Open Doors and windows to ventilate the room and then leave the premises.**
- 2. Let the fire go out.**

EXPLODED VIEW



PARTS LIST

No.	Description	Code	No.	Description	Code
1.	Spin Valve	B00032AXX	56.	Baffle	Q00166BXX
2.	Front Cleaning Door	B00164BXX	57.	Base Plate	Q00168BXX
3.	Bonnet Blanking Plate	B00296AXX	58.	Oven Bottom Back	Q00169AXX
4.	Fire Door	B00558AXX	59.	Oven Bottom Side (Left)	Q00170BXX
5.	Oven Door	B00559AXX	60.	Oven Bottom Side (Right)	Q00171BXX
6.	Ash Door	B00560AXX	61.	Oven Bottom	Q00172BXX
7.	Warming Oven Door	B00561AXX	62.	Top Oven Back	Q00173BXX
8.	Ash Door Back	B00562AXX	63.	Right Side Oven Top	Q00176CXX
9.	Bonnet	B00571AXX	64.	Top Oven Side (Left)	Q00177AXX
10.	Bonnet Cover	B00572AXX	65.	Oven Top	Q00187CXX
11.	Bonnet Spin Valve	B00573AXX	66.	Fire Bar Special	Q00233AXX
12.	Trivet	B00574AXX	67.	Cleaning Plate To Hob	Q00590AXX
13.	Front	B00584AXX	68.	Flue Way Right	Q00735BXX
14.	Hob	B00644AXX	69.	Fire Door Back	Q00746AXX
15.	Riddling Handle	F00063AXX	70.	Oven Damper	Q00749AXX
16.	Thermostat Holder	F00076AXX	71.	Lining Panel - 300	RO2E340773
17.	Side Panel	F00078AXX	72.	Strap - Lid Centre Fixing	RO2M342362
18.	Back Panel	F00079CXX	73.	Cup - Coil Handle	RO4M340521
19.	Upper Blanking Plate	F00082AXX	74.	Coil Handle	RO4M340522
20.	Front Cover Plate (Short)	F00083AXX	75.	Insulating Cover	RO4M342347
21.	Front Cover Plate (Long)	F00084AXX	76.	Insulating Cover Base	RO5E342348
22.	Fire Bar Link	F00097AXX	77.	Hinge Butt" (Black)	U00029AXX
23.	Donard SF Ashpan	F00100AXX	78.	Oven Damper Knob (Black)	U00032AXX
24.	Base	F00101DXX	79.	T/Stat Knob (Black)	U00094AXX
25.	Boiler	F00102DXX	80.	Towel Rail Bracket RH	U00106AXX
26.	Lower Blank Plate	F00117AXX	81.	Towel Rail Bracket LH	U00107AXX
27.	Main Oven Door Panel	F00906AXX	82.	RH Door Handle (Black)	U00156AXX
28.	Warming Oven Door Panel	F00907AXX	83.	Extended Hinge (Black)	U00158AXX
29.	RH Strap	F00911BXX	84.	Lid Hinge	U00197AXX
30.	Base Plate	F00914AXX	85.	Boiler Plug	V00016AXX
31.	Fix Plate RH	F00915AXX	86.	Cleaning Brush	V00072AXX
32.	Fix Plate LH	F00916AXX	87.	Poker	V00073AXX
33.	Hob Back Filler Piece	F00986AXX	88.	Scraper	V00074AXX
34.	Oven Side Flue Plate	F01001AXX	89.	Roasting Tin	V00091AXX
35.	Hinge Cover Plate	F01257AXX	90.	Oven Shelf	V00092BXX
36.	Thermostat Without Knob	G00004AXX	91.	Stay Rod	V00096AXX
37.	Thermometer 100 to 300	G00519AXX	92.	Secondary Air Pipe	V00097AXX
38.	Main Oven Door Insulation	J00230AXX	93.	Grill For Roasting Tin	V00099AXX
39.	Warming Door Insulation	J00231AXX	94.	Ashpan Lifter	V00499AXX
40.	Serial Number Plate	N00234BXX	95.	Towel Rail Bung	V00522AXX
41.	Gasket (200 * 43 * 2mm)	P00011BXX	96.	Port Hole Cover	V00774AXX
42.	Silicone Oven Seal 266mm	P00097AXX	97.	Spacer	V00775AXX
43.	Silicone Oven Seal 312mm	P00098AXX	98.	Pivot Pin	V00800AXX
44.	Silicone Oven Seal 416mm	P00099AXX	99.	Catch	V00801AXX
45.	Steam Escape	Q00107AXX	100.	Fix Spindle	V00802AXX
46.	Riddling Grate	Q00113AXX	101.	Torsion Spring 1557 RH	V00865AXX
47.	Fire Bar Standard	Q00148AXX	102.	Towel Rail	V00888AXX
48.	Fire Bar Frame	Q00149AXX	103.	Damper Axle	V00905AXX
49.	Hotplate	Q00152AXX	104.	Badge	V01040AXX
50.	Cleaning Plate to Hotplate	Q00154AXX	105.	Steam Vent	W00904AXX
51.	Front Cleaing Door Clip	Q00158AXX	106.	Stay Rod Nut	W00920AXX
52.	Summer Grate Support	Q00162AXX	107.	Stay Rod Nut Cap	W00923AXX
53.	Summer Front Brick	Q00163AXX			
54.	Summer Back Brick	Q00164AXX			
55.	Summer Side Brick	Q00165AXX			

NOTES

NOTES

NOTES

With AGA Rangemaster's policy of continuous product improvement, the Company reserves the right to change specifications and make modifications to the appliance described at any time.



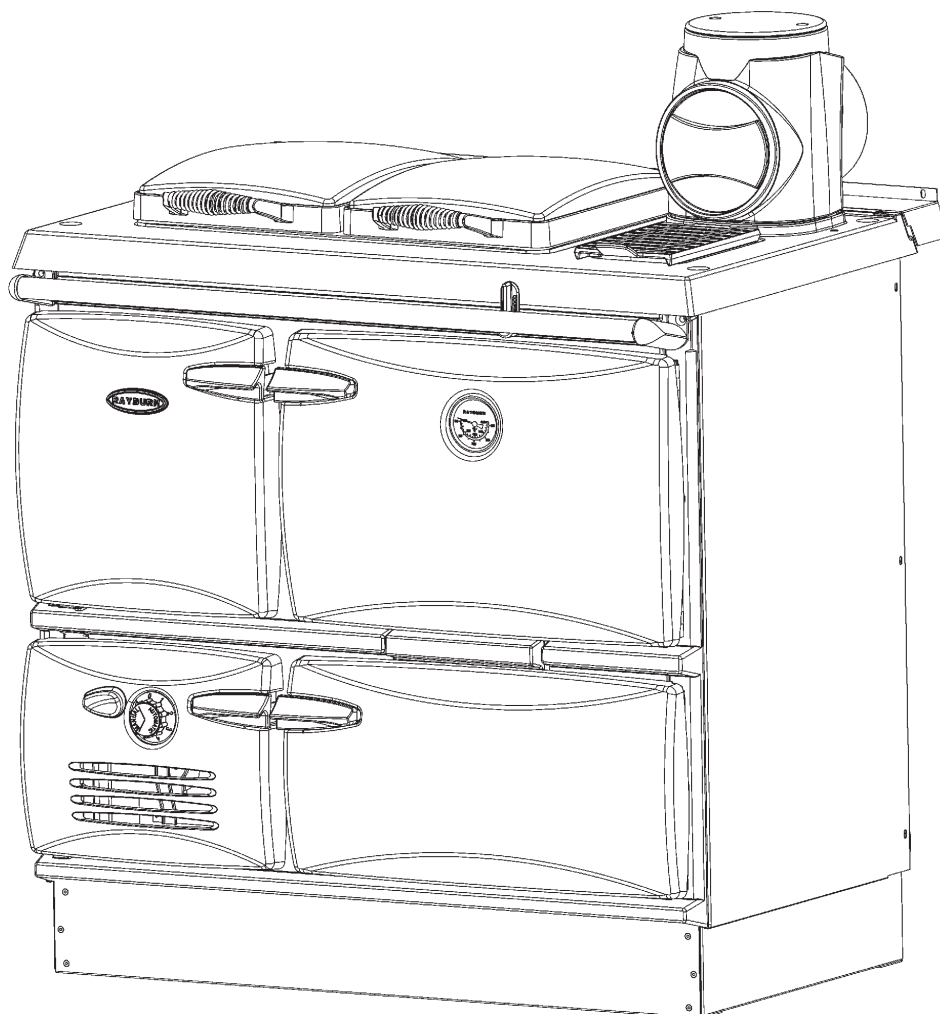
from The AGA logo is a small, black, horizontally-oriented oval with the word "AGA" in white, sans-serif font.

Manufactured by
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Shropshire TF1 5AQ
England

www.rayburn-web.co.uk
www.agacookshop.co.uk



RAYBURN 370 SFW



This appliance is hot while in operation and retains its heat for a long period of time after use. Children, aged or infirm persons should be supervised at all times and should not be allowed to touch the hot working surfaces while in use or until the appliance has thoroughly cooled.

When using the cooker in situations where children, aged and/or infirm persons are present a fireguard must be used to prevent accidental contact with the stove. The fireguard should be manufactured in accordance with BS 8423:2002.

USER INSTRUCTIONS

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Fire Cement - when handling use disposable gloves. In case of skin contact wash immediately with plenty of water.

Glues and Sealants - exercise caution - if these are still in liquid form use face mask and disposable gloves.

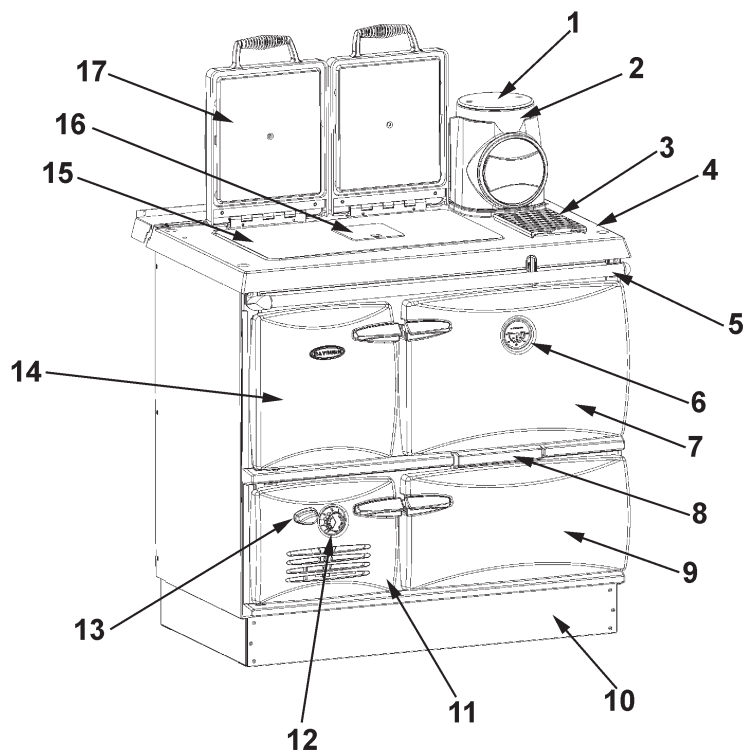
Glass Yarn, Mineral Wool, Insulation Pads, Ceramic Fibre, Kerosene Oil - may be harmful if inhaled, may be irritating to skin, eyes, nose and throat. When handling avoid inhaling and contact with skin or eyes. Use disposable gloves, face-masks and eye protection. After handling wash hands and other exposed parts. When disposing of the product, reduce dust with water spray, ensure that parts are securely wrapped.

Handling Adequate facilities must be available for loading, unloading and site handling.

Asbestos

This stove contains no asbestos. If there is a possibility of disturbing any asbestos in the course of installation then please seek guidance and use appropriate protective equipment.

SCHEMATIC



1. Blanking Plate
2. 6" Flue Box
3. Trivet
4. Hob
5. Towel Rail
6. Oven Thermometer
7. Main Oven Door
8. Front Cleaning Door
9. Warming Oven Door
10. Base Frame
11. Ashpit Door
12. Boiler Thermostat
13. Riddling Cover
14. Fire Door
15. Hotplate
16. Cleaning Panel to Hotplate
17. Hotplate Covers
18. Flue Damper

SUMMER OPERATION

(i.e. when Central heating is not in use).

The fire-box of this cooker can not be modified to reduce the boiler output while cooking. Therefore if cooking is carried out during the summer months then adequate dissipation of the heat produced be allowed for in your central heating circuit to ensure that the hot water within the circuit does not boil.

RECOMMENDED FUELS

All fuels should be stored under cover and kept as dry as possible prior to use. This appliance has been tested using manufactured briquetted smokeless fuel (Ancit) for closed appliances, sized between 20g and 140g and wood logs. Other fuels are commercially available and may give similar results. Wood logs up to 380mm long are suitable. All fuels should be stored under cover and kept as dry as possible prior to use.

Do not use fuels with a Petro-coke ingredient as this may cause the grate to overheat, causing damage. Reduced outputs will result when fuels of lower calorific values are used. Never use gasoline or gasoline type lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or freshen up a fire in this heater. Keep all such liquid well away from the heater at all times. Operate the stove only with the fuelling door closed except for re-fuelling.

OPERATION

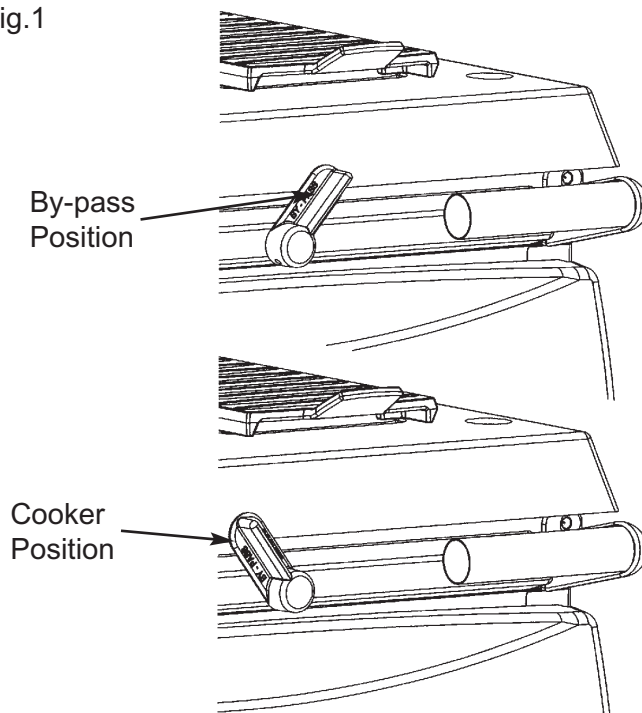
Before lighting the fire move the flue damper position to 'by-pass' this will allow flue gases to the chimney unobstructed, when the fire is established the damper position can be moved to cooker. See Fig.1

WARNING: If there is a possibility that a part of the heating system may be frozen you should not light the stove until you are confident that the system is free of ice, has no leaks and water is able to fully circulate.

WARNING: Do not to use an aerosol spray near the appliance when it is in use or while the appliance remains hot.

WARNING: Ensure that curtains close to the cooker cannot ignite even when displaced by a prevailing draught.

Fig.1



LIGHTING THE FIRE

Fully open the thermostat and set the flue damper to by-pass, kindle with paper and sticks in the usual way and ignite by using a taper or rolled wad of paper inserted into the ashpit. Under no circumstances should any inflammable liquid i.e. petrol, paraffin etc. be used to light the fire. When the fire is well established close the direct damper fully and keep it closed. Add fuel to the firebox as required and adjust the thermostat to suit the current requirements. The cooker should not be used as an incinerator.

FUELLING

When fuelling set the flue damper to by-pass as this will help to eliminate smoking. Afterwards be sure to reset the flue damper to the required setting. Never pack fuel tightly or fill the firebox to capacity. A lower level fire is more effective particularly in regard to water heating efficiency. The maximum fuel level is up to the bottom of the firebox door and rising upwards at a 30° angle towards the back of the firebox.

CONDENSATION

If the appliance is run for extended periods on a low fire, especially when burning wood or peat the fire can cool down to such an extent that vapour in the flue gases may condense. This will make the inside of the flue damp so that the soot sticks to the flue and the tarry mixture formed may drip down into the appliance. It is always a good idea to run at a high rate

whenever possible, because it is so easy to light, a lot of people, especially in the Summer, run the appliance for just a few hours with a strong roaring fire. The appliance is then allowed to die until the hot water is used up and then is relit. From the appliance and flue point of view, this is a better technique than running a low fire continually. (Fig. 1 & 2)

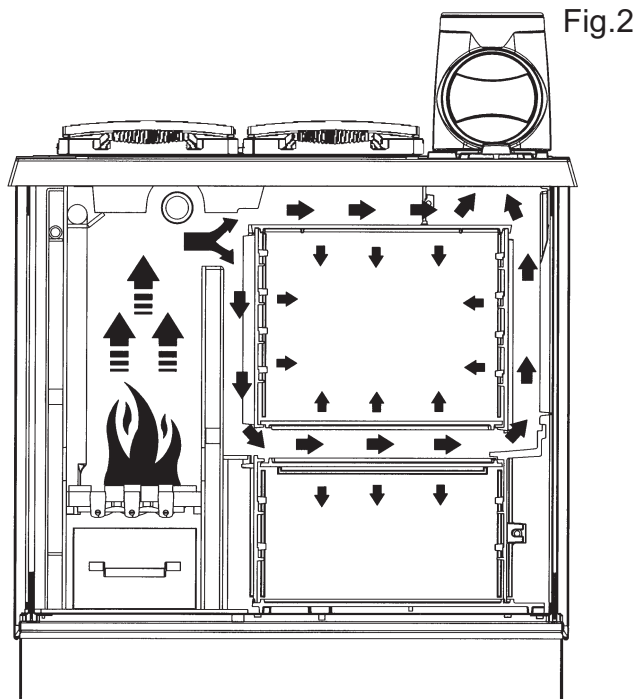


Fig.2

Some attention should be paid to the amount of ash that is allowed to build up in the firebox. Wood has better burning characteristics if a bed of ash is allowed to build up, riddling only being necessary to level up the fire (for cooking, for example). Coal or smokeless fuels, on the other hand, burn better if they are well riddled to allow a good airflow to the fire. For slow combustion it is better to have a thicker ash bed for all fuels. Therefore, do not riddle the fire before slowing it down for overnight burning, but riddle it if required in the morning or before cooking.

When using anthracite or coal avoid excessive firing conditions. High temperatures are unnecessary and can do serious harm to the cooker. The first indication that overheating is taking place will be the formation of clinker (melted ash) in the firebox and this should be removed immediately otherwise damage will occur to the firebars and cooker components and any damage here should be repaired without delay.

ASH REMOVAL & DISPOSAL

Your cooker is provided with a steel aspan. This aspan should be emptied every day.

If ashes are allowed to build to grate level you could damage the firebars by overheating. We recommend that you remove ashes following overnight burn or when the aspan is 2/3 full.

To remove the aspan using the glove provided, slide the aspan carefully from the ash compartment.

Ashes should be placed in a metal or other non-combustible container with a tight fitting lid. The closed container of ashes should be placed on a non-combustible material, pending final disposal. If ashes are buried in soil, or otherwise dumped they should be retained in the closed container until they are thoroughly cooled.

When aspan is replace, please ensure that the ash door is closed and latched securely.

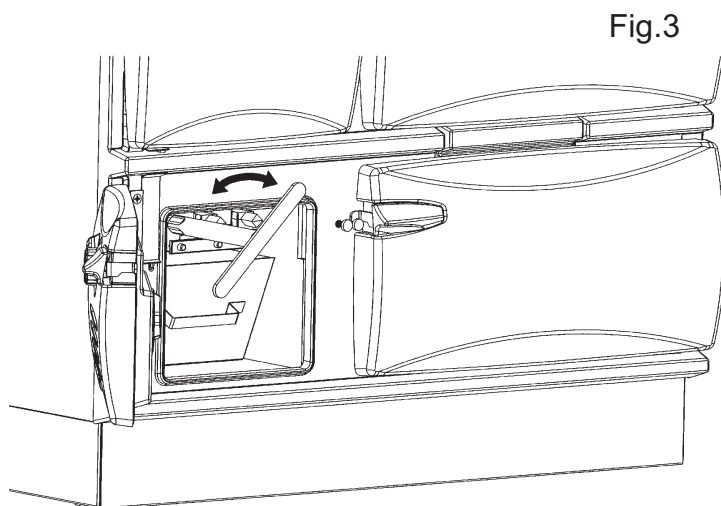
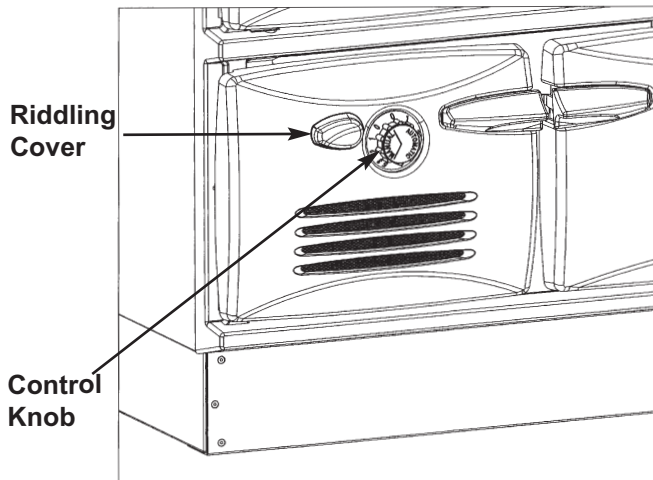


Fig.3

EXTERNAL RIDDLING

Lift the riddling cover on the ash door and insert the operating tool into the hole until it engages with the spigot on the grate and move vigorously. In addition it is also recommended that the firebed itself be thoroughly raked at intervals thus loosening up such debris as clinker, stones, etc. which are then easily removed. (Fig.3).

Fig.4



THERMOSTAT WITH MANUAL OVERRIDE

The air supply to the fire is controlled by the thermostat probe inserted into the boiler and the control knob attached to the ash door.

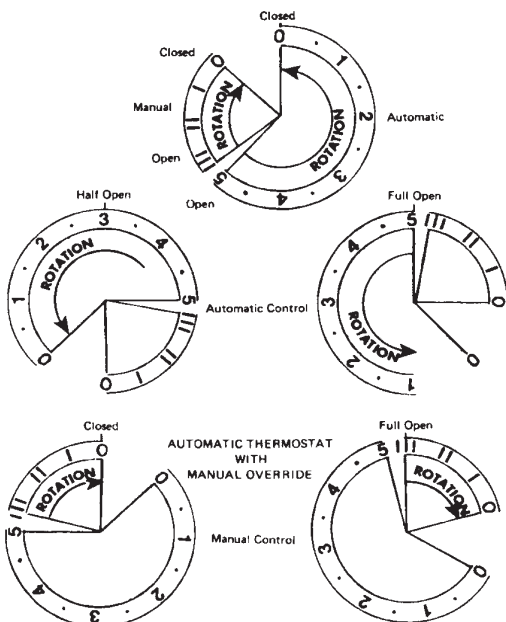
The automatic thermostat has 6 settings which control the heat to which the boiler water will rise for central heating purposes. Setting 0 will close the thermostat,, setting 3 will give a nominal burning rate of 2½ to 3kg per hour of house coal. Setting 5 will give maximum water heating and high oven temperatures.

The thermostat will close down when the water reaches the temperature chosen by the selected setting, it will close fully when the water temperature reaches 90 - 95° C when set at 5 - to prevent boiling.

(See Fig. 5)

The thermostat manual override has 4 settings which retain the air flap in a predetermined open position for steady heat when baking and cooking. It will only close fully when the water temperature reaches 90 - 95° C when set at 5 - to prevent boiling.

Fig.5

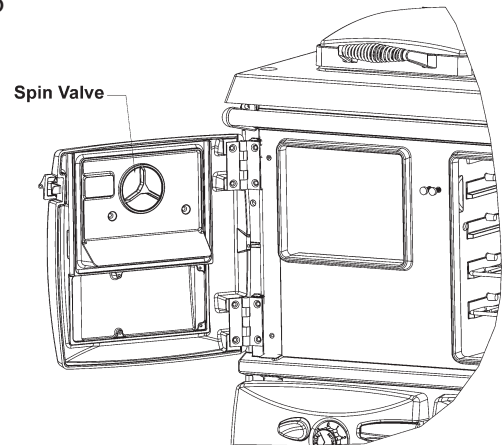


OVERNIGHT BURNING

There is a small air bypass into the ashdoor and this is normally sufficient when the thermostat is closed to hold the fire at least 10 hours after banking. If the fire is out and the fuel unburned set the control knob of the thermostat from ½ to 1 in order to sustain overnight burning.

FIREDOOR SPIN VALVE

Fig.6



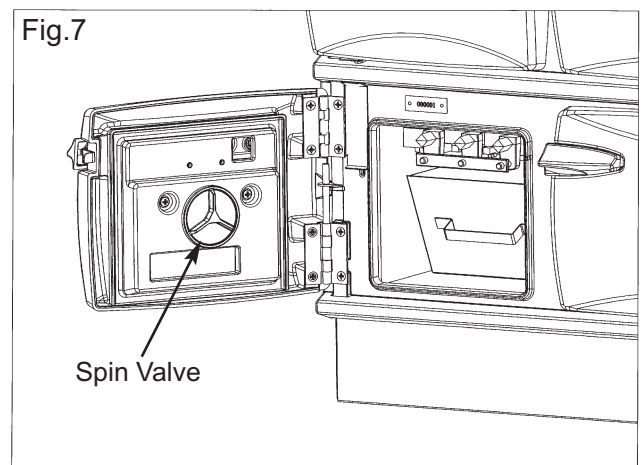
Heated secondary air enters the firebox through a spin valve in the firedoor back plate while the valve is open to assist combustion of smoke volatiles.

Close when burning anthracite. (See Fig.6)

ASHDOOR SPIN VALVE

The ashdoor spin valve allows additional air to the firebox for marginal draught conditions. This can be adjusted to suit your requirements. Close when setting the cooker for overnight burning. (See Fig.7)

Fig.7



BOILER INSULATING PLATE

This plate is fitted by removing the hotplate and sliding the insulating plate down between the boiler and oven side. Make sure that the spacing projections are facing the oven and the top flange is resting on the boiler. Replace the hotplate.

The boiler insulating plate may be used with the summer plates or on its own as a means of reducing the boiler output and increasing the heat to the oven. (See Fig. 8)

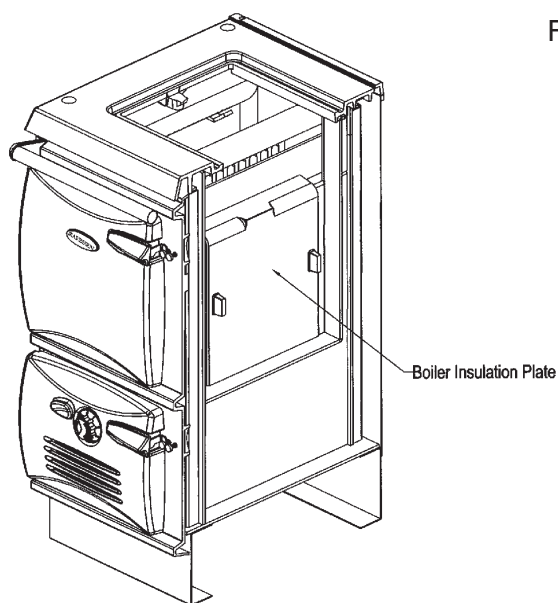


Fig.8

SUMMER GRATE & HEAT SHIELD ASSEMBLY INSTALLATION INSTRUCTIONS

To obtain a reduction in boiler output during the summer the Cooker is supplied with a removable summer grate and cast iron heat shield plates as standard.

Remove the existing rocker grate and stand the summer grate on the supporting legs after inserting it through the fire door. Fit heat shield plates as shown in diagram. (See fig. 9 & 10)

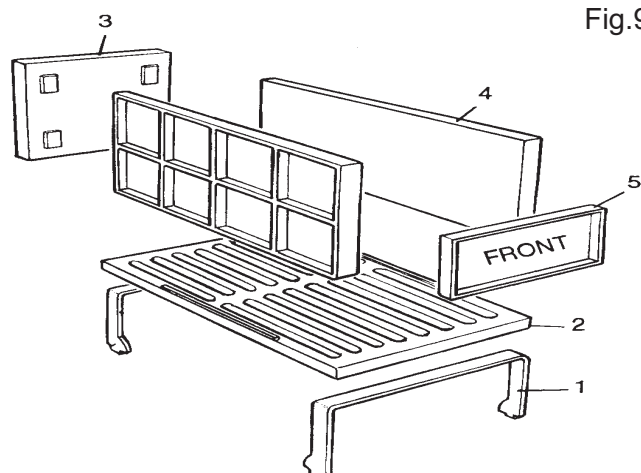
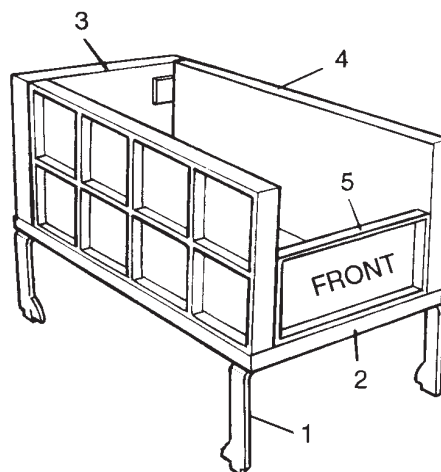


Fig.9

Fig.10



CONTENTS

QTY

1.	Support legs	(2)
2.	Summer Grate	(1)
3.	Back Heat Shield Plate	(1)
4.	Side Heat Shield Plate	(2)
5.	Front Heat Shield Plate	(1)

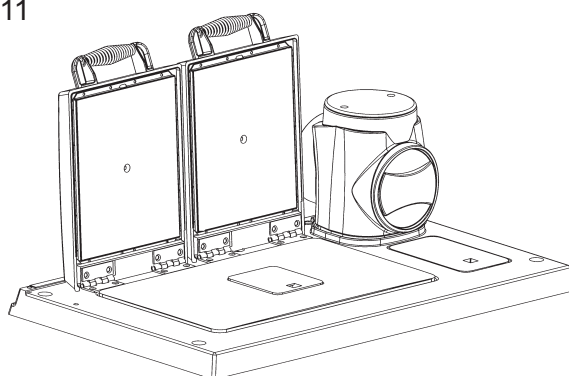
Assembly:

1. Remove the rocker grate through the ashpit door. Brush down the sides of the fire chamber and clean out the debris before fitting the summer grate and heat shields.
2. Insert the support legs (item 1) through the fire door and rest them on the shaker grate support lugs. To lock support legs into position, fit legs as per fig. 15.
3. Insert the summer grate (item 2) through the fire door and rest it on the support legs (item 1).
4. Insert the heat shield plates in the following order - items 3, 4 and 5.

NB. When using the summer grate and heat shields it will be necessary to use a poker to clear ash before refuelling.

HOTPLATE COVERS

Fig.11



COOKING UTENSILS

The insulating covers retain most of the heat that would otherwise be radiated into the kitchen. They also retain the heat in the hotplates so that rapid heating of cooking utensils will result when one or both of them are lifted for cooking purposes. (See Fig. 11)

USE OF OVENS

For best cooking results use heavy based, flat bottomed utensils.

When baking or roasting, set the flue damper to cooker and open the thermostat fully until the thermometer shows a temperature about 50°F higher than that which is required. Then close the thermostat to a point where the required temperature is sustained (a little practice will soon show how much thermostat adjustment is necessary). Much will depend on the strength of the chimney draught. It will be found that a thermostat setting of 3 will be suitable in most cases.

The main oven is heated on all four faces. The simmering oven is heated on the top face only.

The temperature will be about half that of the main oven, for slow cooking, of casseroles, stews, soups etc.

INTERNAL/FLUE CLEANING

The flue or chimney will need to be cleaned regularly. How often will depend a lot on how your Cooker is run, but, to start with, make a point of inspecting the flue system every one or two weeks

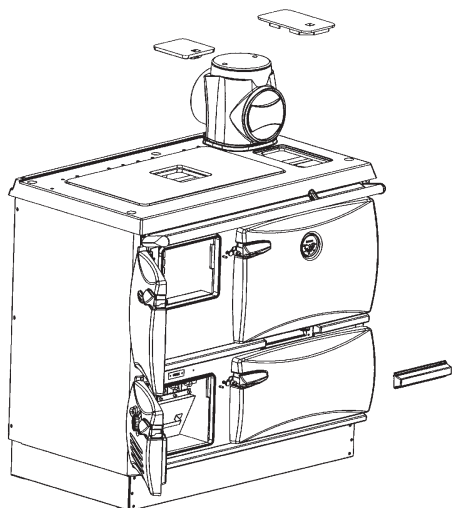
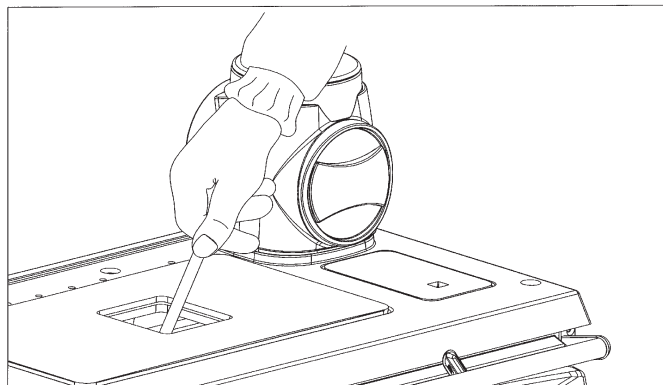


Fig.12

This period may well be extended as time goes by if there is little sign of deposits. Some people find they need to sweep the flue every six to eight weeks but a longer period is more normal and in some cases this may be as long as 12 months.

For most efficient heat transfer to water jacket, all surfaces that come into contact with the flue gases should be kept clean. Regular cleaning will maintain the efficiency of the unit. Use the scraping tool to remove deposits from the inside surfaces of the firebox, the flue ways and top water tube. Regularly look at the top and side of the oven by removing the hotplate cleaning panel and removing the deposits with scraper. To help keep deposits to a minimum, it is a good idea to have a fast fire for 15 minutes at least once a week. Loose deposits will be scoured off and will make the necessity of cleaning out less frequent.

Fig.13

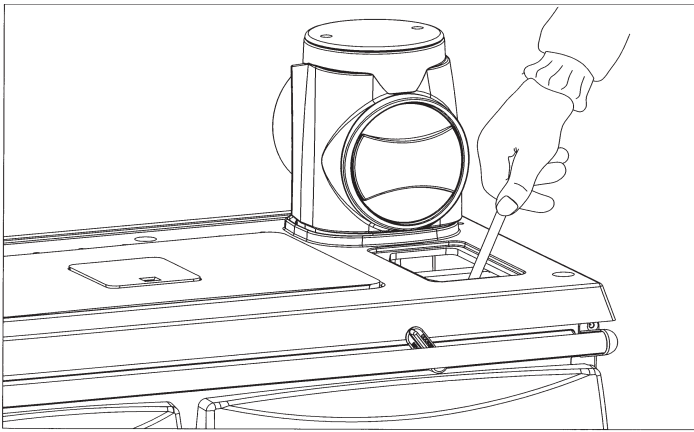


Every week, depending on the type of fuel used, it will be necessary to take off the cleaning access plates to remove deposits. The procedure is as follows:

Allow cooker to cool down completely, remove all loose sections on top of the Cooker, set the flue damper to by-pass, remove the flue box plate from the flue chamber and remove the cleaning door from the front of the Cooker in order to obtain access. Remove the hotplate cleaning panel and hob cleaning plate, and clean the heat collecting fins on the hotplate. Carbon deposits on these surfaces will reduce efficiency by up to 20%. All deposits from the flue pipe and the top of the oven may be brushed both into the firebox and down the side of the oven.

Deposits which have accumulated on the side of the oven must also be brushed downwards. To remove the accumulated ash and soot, thoroughly clean out the residue from the side flues and base plate through the front cleaning door opening — this operation is essential otherwise the flow of hot gases will be obstructed and satisfactory oven temperatures will not be maintained, apart from which such deposits may contribute to smoking. Replace all the loose parts which have been removed making sure that all cooking surfaces have been thoroughly cleaned on the underside. (See Figs. 12, 13 & 14).

Fig.14



GRATE REMOVAL

Lift the back of the grate and push it in towards the back of the boiler until the front of the bars pass the front casting. Tilt the grate up on the right hand side, drop down the left hand side towards the back of the boiler and pass the grate through the opening in the front casting, taking care not to damage the enamel.

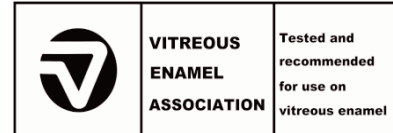
CLEANING

IMPORTANT: BE CAREFUL OF THE HOT APPLIANCE.

General cleaning must be carried out when the cooker is cool.

Stanley cookers are finished in a high gloss vitreous enamel. To keep the enamel in the best condition observe the following tips:

1. Wipe over daily with a soapy damp cloth, followed by a polish with a clean dry duster.
2. If milk, fruit juice or anything containing acid is spilt on the hob or down the cooker, be sure to wipe it immediately or the vitreous enamel may be permanently discoloured. Jam and preservatives containing sugar can permanently damage the vitreous enamel.
3. Keep a damp cloth to hand while cooking, to wipe up any spills as they occur, so they do not harden and become more difficult to remove later.
4. If spills do become baked on, a cream cleanser can be used. For stubborn deposits a soap impregnated pad can be carefully used on the vitreous enamel.
5. Use only products recommended by the Vitreous Enamel Association, these products carry the Vitramel label.



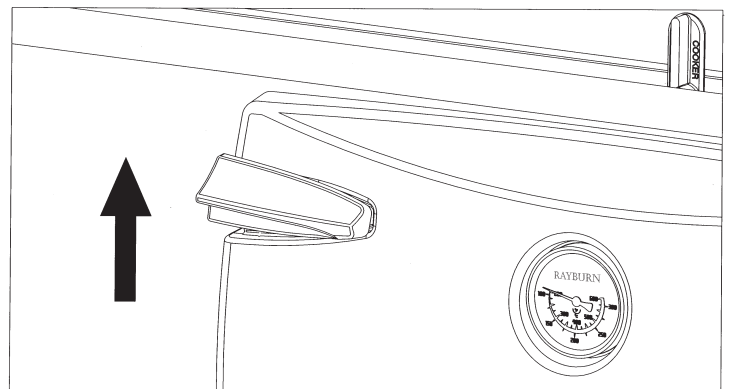
6. In the oven, spills and fat splashes are carbonised at high temperatures: occasionally brush out with a stiff brush. The shelves can be soaked and cleaned with a cream cleanser.
7. Both insulating covers should be raised and allowed to cool before cleaning the enamel with a soapy damp cloth. Use a wire brush to keep the cast iron hotplate clean.

DO NOT USE ABRASIVE PADS OR OVEN CLEANERS CONTAINING CITRIC ACID ON ENAMELLED SURFACES. ENSURE THAT THE CLEANSER MANUFACTURERS INSTRUCTIONS ARE ADHERED TO.

OPENING COOKER DOOR

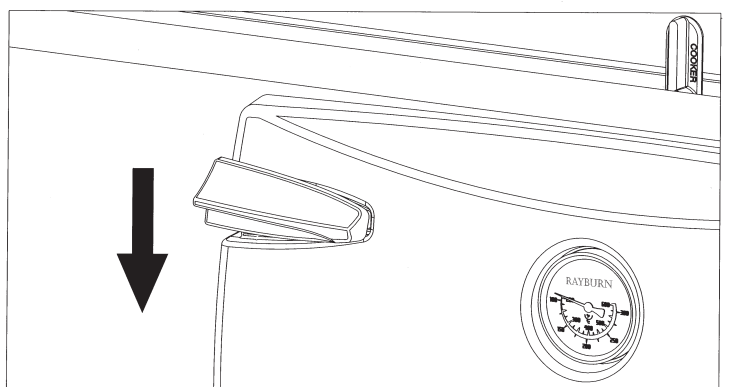
1. To Open Door Lift handle and pull door open. See Fig. 15.

Fig.15



2. To Close Door - Lift handle, push door closed, press down to engage latch and release. See Fig.16.

Fig.16



NOTE - DO NOT SLAM SHUT THE DOORS AS THIS WILL LEAD TO DAMAGE TO THE DOOR HANDLES.

AIR SUPPLY

A permanent unobstructed air vent communicated directly to outside air or an adjacent room which itself has a permanent air vent to outside is required.

Any air inlet grilles must be positioned so that they are not liable to blockage.

It is not permissible to use an air extraction device in the same room as the appliance, unless additional ventilation is provided to prevent any adverse effect on the flue.

Effect of Extractor Fan

Avoid if possible the installation of an extractor fan in the same room as the cooker. Compensating air inlets must be introduced equivalent to the capacity of the fan when fitted.

COOKER CLEARANCE

The Cooker should not be installed at zero clearance to combustible materials. The sides should have a minimum clearance of at least 7.5 cm (3") from combustible materials unless otherwise fully insulated.

This cooker is supplied with a back filler piece which should be used with fitting the cooker between kitchen units. This filler piece is mounted to the wall behind the cooker using the appropriate screws and rawl plugs (not supplied) and allows adequate clearance from the front of the cooker to the front of the kitchen units for door opening (see Fig.5 & 5a)

CHIMNEY FIRES

Prevention: Chimney fires do not occur in clean, intact, properly installed chimneys. Have a professional chimney sweep clean and inspect your appliance at least once a year. More frequent cleaning may be required, based on the type of fuel burned and the frequency of use. In general, an older appliance or one that is used frequently, will require more than one clean per year.

Detection: The first indication of a chimney fire is usually the noise - a roaring sound grows louder as the fire's intensity increases. Clouds of black smoke and sparks will be seen exiting the top of the chimney; in severe fires, flames can extend several feet about the chimney.

Action: In case of a chimney fire follow these steps but do not put yourself or others in peril:

1. Call the fire brigade immediately.
2. Get everyone out of the property.
3. Close down the air supply to the appliance i.e. the primary air spinner and the flue damper. Limiting the fire's air supply will reduce its intensity. If there is a damper in the chimney connector, plug or close the opening.
4. If a fire extinguisher is available, open the appliance door just enough to insert the nozzle of a 10lb, dry chemical fire extinguisher rated for Class ABC fires. Discharge the entire content of the fire extinguisher into the appliance and shut the door.

CO ALARMS

Building Regulations require that whenever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturer's instructions.

Provision of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the appliance and chimney system.

Your installer should have fitted a CO alarm in the same room as the appliance. If the alarm sounds unexpectedly, follow the instructions given under "Warning Note" below.

Properly installed, operated and maintained this stove will not emit fumes into the dwelling. Occasional fumes from de ashing and re fuelling may occur. However, persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, then the following immediate action should be taken:

- (a) Open doors and windows to ventilate the room and then leave the premises.
- (b) Let the fire go out.
- (c) Check for flue or chimney blockage and clean if required
- (d) Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. If necessary seek expert advice.

The most common cause of fume emission is flue-way or chimney blockage. For your own safety these must be kept clean at all times.

FAULT FINDINGS

1. Poor Chimney Draught	(a) Obstruction (b) Too Low (c) Too Wide (d) Crack in Wall (e) Shared by another unit	(a) Clear and Clean (b) Raise Height above Ridge (c) Fit Flue Liner 15 to 23 c.m. (d) Repair Cracks (e) Cut of other Unit.
2. Excessive Chimney Draught	(a) High Chimney	(a) Open Flue Cover of fit Draught Stabiliser
3. Down Draught	(a) High Trees (b) High Buildings (c) Negative Pressure Zone	(a) Raise Chimney Height (b) Raise Chimney Height (c) Fit Cowl
4. Cooker Smoking	(a) Insufficient Primary Air (b) Chimney Choked (c) Side Flueways Choked (d) Down Draught	(a) Provide Room Air Inlet (b) Clean Chimney (c) Clean Flueways (d) Raise Chimney Height
5. Hot Plate Not Heating	(a) Soot Under Hot Plate (b) Fire too Low (c) Utensils not Flat	(a) Remove and Clean (b) Build better Fire (c) Use machined based Utensils
6. Oven Not Heating	(a) Poor Chimney Draught (b) Flueways blocked with soot (c) Damper open to Chimney (d) Faulty Thermostat	(a) Raise Height or Fit Cowl (b) Clean Out (c) Close Damper (d) Check and replace if necessary
7. Radiators Not Heating	(a) Pump not Working (b) Air in Radiators (c) Pipe System Faulty (d) Excessive Number of Radiators (e) Radiator Valves not adjusted	(a) Check and replace if defective (b) Vent Radiators (c) Check Pipe Sizes and Circuit (d) Turn off un-needed Radiators (e) Adjust Valves to give even flow
8. Domestic Hot Water Cylinder not heating	(a) Cylinder too Large (b) Flow Pipe too small (c) Flow Pipe crossed (d) Cylinder too far away (e) Hot water from boiler not reaching cylinder	(a) Use 135 - 180 L Cylinder (b) Use 25mm Bore Pipe (c) Reverse Flow Pipe (d) Not more than 7.8m fully lagged. (e) Adjust Flow Control Valves or fit injector tee.
9. Intermittent Performance	(a) Cooker starved of Primary Air (b) Extraction Fan in room (c) Cooker subjected to wind change (d) Dirty Flueways (e) Poor Fire (f) Uncontrolled Burning	(a) Provided Air Inlet in Room. (b) Provide additional Air Inlet in room (c) Raise Chimney of Fit Cowl (d) Clean Flueways Frequently. (e) Burn more Fuel (f) Repair or Replace Thermostat
10. Domestic Hot Water Rusty	(a) Leak in Indirect Cylinder Coil (b) Incorrect Cylinder Fitted	(a) Replace Cylinder (b) Check with installer

It is of the utmost importance to keep the flue pipe and chimney clear of deposits by regular sweeping of the chimney irrespective of whether the fuel used is classed as smokeless or not. All fuels give rise to soot or ash deposits and regular cleaning is essential for safe operation.

Blocked or partially obstructed flueways and chimneys will cause dangerous fumes to be emitted into the room, these may well be invisible if a smokeless fuel is burned.

NOTES

NOTES

NOTES

With AGA Rangemaster's policy of continuous product improvement, the Company reserves the right to change specifications and make modifications to the appliance described at any time.



from 

The AGA logo is a small, black, rounded rectangular badge with the letters "AGA" in white, bold, sans-serif font.

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